

REMARKS

The Official Action of December 1, 2004, and the newly cited prior art relied upon therein have been carefully reviewed. The claims in the application are now claims 6-13, and these claims define patentable subject matter warranting their allowance. The applicant therefore respectfully requests favorable reconsideration and allowance.

The amendments presented above are primarily based on Example 2, and also on certain figures (e.g. Figs. 2c and 5) and also on the part of the specification spanning pages 8 and 9. The new claims 12 and 13 are patentable for the reasons pointed out below.

Claims 6, 7 and 9-11 have been rejected under §102 as anticipated by newly cited Stein et al WO 99/59722 (Stein). This rejection is respectfully traversed.

While applicant respectfully disagrees that Stein anticipates applicant's claims as previously presented, nevertheless claim 6 has been amended above to focus on the use of organic substrates such as used in Example 2, the use of organic substrates being subject matter clearly not shown

(or made obvious) by Stein<sup>1</sup>.

Thus, the present application relates to a reaction probe chip for binding an analyte to be detected, the chip being used for determination of genes and diagnosis of physiological functions, enabling recognition of many functional molecules. More particularly, the present invention relates to a stack of reaction probe chips, each of the chips being in the form of a film or sheet, preferably flexible film or sheet made of an organic material, e.g. plastic, and most preferably in the form of a laminate of two such sheets or films laminated together with the carrier therebetween. The use of reaction probe chips of organic material provides the advantage of easy separation of one chip from the stack by simply peeling it away from the stack, whereby it can be further processed.

As described in, for example, Example 2 of the present application, the stack of chips can be prepared by first preparing a polyester substrate in the form of sheet (e.g. length 50 mm, width 30 mm, thickness 0.3 mm) having an arrangement of through-holes of e.g. 2 mm in diameter. A

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<sup>1</sup> The amendment presented above to claim 6 is made without prejudice to applicant's rights, including those rights provided by §§120 and 119, to pursue broader claims in a continuing application, if applicant chooses to do so.

glass fiber filter paper for example is sandwiched between the substrates, and the composite is heat sealed to prepare a reaction chip substrate. One-hundred of the substrates, for example, are superposed one on another, and reagents are sequentially passed through the respective holes vertically communicating with each other to synthesize different oligonucleotides.

On the other hand, Stein discloses a three-dimensional (3D) array of solid-phase supports for parallel synthesis of a library of molecules with 3D diversity. After synthesizing on the surface of supports such as ball supports, oligonucleotides are cleaved from the support, collected and identified. The purpose of the Stein device is to provide synthesized molecules such as oligonucleotides. The molecules synthesized on solid surface of supports are cleaved and then used. Stein does not show, teach or suggest use of a reaction probe chip of the present invention for analysis.

In addition, Stein does not disclose a substrate in the form of sheet or film made of flexible organic material.

Withdrawal of the rejection is in order and is respectfully requested.

Claim 8 has been rejected as obvious from Stein in view of Dusterhoft et al WO 98/08954 (Dusterhoft). This rejection is respectfully traversed.

Dusterhoft has not been cited to make up for the aforementioned deficiencies of Stein, and indeed does not do so. As claim 8 depends from claim 6, it therefore incorporates the subject matter of claim 6. Therefore, even if the proposed combination were obvious, i.e. even if it were obvious to modify Stein in view of Dusterhoft as proposed in the rejection, the resultant reconstruction would not correspond to the subject matter of claim 8 for the reasons pointed out above with respect to claim 6.

Withdrawal of the rejection is in order and is respectfully requested.

The prior art document made of record and not relied upon has been noted, along with the implication that such document is deemed by the PTO to be insufficiently pertinent to warrant their application against any of applicant's claims.

Applicant believes that all issues raised in the Office Action have been addressed above in a manner favorable to allowance of the present application.

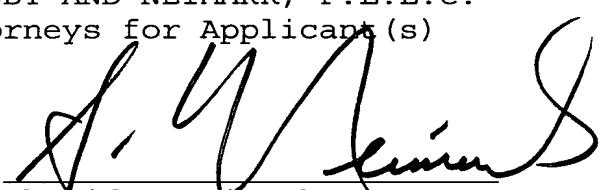
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Accordingly, applicant respectfully requests favorable reconsideration and early formal allowance.

Respectfully submitted,

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